

523012/89

**CITY OF RIVERSIDE**  
**HUMAN RESOURCES DEPARTMENT**  
**CLASSIFICATION SPECIFICATION**

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Revised

**TITLE: INSTRUMENT TECHNICIAN**

**DEFINITION**

Under general supervision, to perform skilled electrical and electronic work in the maintenance, repair and calibration of automatic and manual metering, telemetering, control and alarm systems and equipment; and to do related work as required.

**DISTINGUISHING CHARACTERISTICS**

**REPORTS TO:**

**SUPERVISION RECEIVED AND EXERCISED**

**EXAMPLES OF DUTIES**

Duties may include, but are not limited to, the following:

- Troubleshoot problems in electrical and electronic systems, reading and interpreting blueprints, wire diagrams and schematics, and utilizing a variety of test equipment.
- Test, clean, repair, rebuild and calibrate metering and telemetering equipment.
- Test, clean, repair, calibrate and reprogram microprocessor and instrumentation systems and equipment.
- Maintain, repair and balance electronic systems for variable speed pump controls.
- Maintain and repair electrical and electronic operational control, recording and alarm systems and equipment.

**QUALIFICATIONS**

**Knowledge of:**

- Practices, procedures, tools and equipment used in the installation, testing and repair of electronic systems, meters, telemetering and instrumentation equipment, microprocessors and related items.
- Principles of electronic circuitry systems, meter, telemetering, instrumentation, microprocessors and similar equipment.
- Occupational hazards and safety precautions necessary in the work.

**Ability to:**

- Work with independence and make decisions relative to work methods.
- Troubleshoot, locate, correct and repair defects in instrumentation and electronic control equipment.
- Operate a variety of electronic diagnostic equipment.
- Interpret plans, blueprints, wiring diagrams and schematics.

- Understand and carry out oral and written instructions.
- Work overtime as required.

**Education and Experience:**

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education: Equivalent to completion of the twelfth grade supplemented by completion of a certificate program in electronics.

Experience: Three years' experience in electrical and electronic instrumentation system installation, maintenance and repair, preferably involving water or wastewater plant treatment processes.

**MEDICAL CATEGORY:** Group 2

**NECESSARY SPECIAL REQUIREMENT**

Possession of or ability to obtain an appropriate, valid California motor vehicle operator's license.

**CAREER ADVANCEMENT OPPORTUNITIES**

**FROM:**

**TO:**